MINING

CURRENT STATE OF MINING SECTOR

Turkey, with respect to geological structure on which it rests, is one of the few countries in the world which can satisfy an important share of its raw material demand thanks to its diversity of mine ores. With respect to mine ore diversity and reserves, it is enlisted in 28th position in terms of total mining production and 10th positionin terms of mine ore diversity out of 132 significant countries known for mining throughout the world.

The share of mining sector in Turkey's GDP was 1.4% as of 2008. Inclusion of glass, ceramics, cement and iron-steel industries in GDP calculation increases the estimates for the real value of mining sector as share in GDP to 9-11%.

The share of fixed capital investments of mining sector in total fixed capital investments were at 1.89% in 2004, 1.80% in 2005, 1.81% in 2006, 1.77% in 2007 and 1.70% in 2008. In 2008, 2.6 billion Turkish Liras (TRY) worth of total fixed capital investment in mining was realized by private sector while 646 million TRY was realized by public sector.

With about 20 national companies with foreign shareholders in mining, which is a labor-intensive sector, a total of 137.726 people are employed in 9137 facilities including the subsidiary industries, mine pit operations, facilities and subsidiary facilities, workshops and seasonal workers in 2008. The most important contribution of foreign capital based companies in mining is incoming technology as well as providing sufficient risk capital invested in the country for mineprospecting activities.

Table 1: Main Indicators on Mining

1. Ham Indicators on Haming	2007	2008
% Share in GDP	1,2	1,4
% Increase in Production (2005=100)	8,3	7,5
Exports(million \$) (with spot rates)	1.661	2.155
% Increase in exports	45	29,7
% Share in total exports	1,5	1,6
Imports (million \$) (with spot rates) (*)	3530	4.541
% Increase in imports (*)	25	29
% Share in total exports (*)	2	2
Import of crude oil-natural gas (million \$) (with spot rates)	21.784	31.109
% Share in fixed capital investments	2,87	1,76 (1)
Public investment (million TRY)	651	928 (1)
Private sector investment (million TRY)	2.470	2.842 (1)
Number of established enterprises	1.198	953
Number of closed enterprises	85	105
Number of license applications	17.669	17.297
Prospecting	11.720	11.075
Operation	1.565	1.967
Total number of license distributed	13.285	13.042

Resource: Programme for 2010, (1)Estimated, (*) Excluding crude oil and natural gas

LEGAL AND INSTITUTIONAL FRAMEWORK

As regards Article 168 of Constitution of Republic of Turkey and Article 4 of Mining Law; mines are under the authority and disposition of the state and are not subject to landownership. Right to prospect and operate rests with the state. State may transfer this right toreal and legal entities for defined periods of time.

As regards Article 6 of Mining Law; mining licenses are given to Turkish citizens who are able to practice their civil rights, companies with legal entities established in compliance with the laws andwhose registered status includes mining activities, public economic enterprises and their companies, their related partnerships and associates, other public institutions and administrative bodies and real or legal persons.

Companies established under foreign law are not able to receive license under this provision, yet companies with foreign capital can either establish a new company under Turkish Trade Law or can get license through purchasing the shares of an existing company.

All mining rights regarding mining operations and compliance, control and supervision are given to Ministry of Energy and Natural Resources (MENR) with Mining Law. Moreover responsibilities regarding prospecting for operation, licensing, supervision and evaluation of the projects for mines, which are under the authority and disposition of state rest with MENR. Additionally, licenses for some mining activities are given by special provincial administrations and by municipalities in adjacent regions.

INCENTIVES

As regards Article 9 of Mining Law, mining activities are entitled to incentives as defined by the Council of Ministers, for those who create an additional value by processing the extracted mine in their own facilities in the country, State gives up 50% of its share of mine produced in such facilities.

The total amount of investment incentives for agriculture, mining, production, energy and services sector has been 164.99 billion TRY for 2002-2008 periodwith 4.30 billion TRY of investment incentives going to mining sector in the same period. Thus the share of mining sector in total amount of incentives for the period 2002-2008 was realized at 2.6%.

SIGNIFICANT SECTORAL POLICIES

Ninth 5-Year Development Plan includes policies on introducing mining to general public, improving environmental awareness and sustainable development approach, improving R&D infrastructure and increasing efficiency, improving the quality of labor force in the sector, increasing the enterprise and facility sizes and promoting mining operations abroad.

MINING AND THE ENVIRONMENT

Mining works cause a little or a significant impact on the environment starting from its mine prospecting until the end of the process regarding the characters of natural and cultural environment,type of mine and mining pit and mining technique applied.

Unless appropriate measures are taken, impacts of mining activities may remain through mine drainage even after the mine pits are closed and abandoned. Regardless of the production method, mine drainage causes environmental pollution both during and after the operation.

The most important aspect in planning mining activities with a sustainable development approach should be to minimize the environmental impact while reaching the maximum production capacity. In the current state in Turkey, environmental protection activities are made legal obligations other than voluntary measures.

Regulation on Recovery of Natural Sites Degraded due to Mining Activity, which was put in force in 2007 and prepared as foreseen by Law on Environment no. 2872, was prepared to ensure the use of natural resources by maintaining protection-use balance and take appropriate measures on environmental degradation that might happen during mining activities.

As regards Mining Law, in proceeding to operation, license holders need to submit "Environmental Compliance Plan" with their projects. Following this, activities carried out in licensed sitesare supervised and controlled by MENR's technical staff periodically as per project and mining working type and rules. These controls, realized from the initiation until the end of mining activity, ensure that sustainable mining activity in harmony with the environment is being undertaken. In case negative impacts in environment or human health are identified, operations are halted immidiately and legal sanctions are imposed as regards relevant legislation.

In case of exhaustion of mine ore reserve, expiry of license or abandoning of the mining site due to any other reason, license holder is obliged to take relevant safety measures and make the operation site environmentally-sound according tooperational project document. Otherwise relevant works for necessary safety measures and environmental restoration of the site are undertaken by the provincial governorships and expenses related to these works are billed to the license holders.

During and after mining activities, surface water, groundwater, air quality, land use, flora, fauna, human capital, archeology, natural and visual landscape may be affected depending on the activity.

Mining projects undergo an environmental impact assessment (EIA) procedure before they are put into operation in order to reduce and prevent their environmental impacts.

Evaluation of the EIAs for mining activities are carried out by Ministry of Environment and Forestry (MOEF). In addition to this, controls are done on a frequent-basis in mining operations according to the complaints received.

Mining wastes are considered as wastes which require special treatment as per Regulation on Control of Hazardous Wastes. Wastes from mining activities are identified and classified as "Wastes occuring from mine prospecting, extraction, operation, physical and chemical processing".

Regulation on Mining Activity Permits which came into force in 2005 states that "Mine wastes are among the wastes that require special treatment. Regulation regarding management of mining wastes will be jointly produced by MOEF and MENR."

OCCUPATIONAL HEALTH AND SAFETY IN MINING SECTOR

Occupational health and safety related to mining activities is organized under Labor Law. In addition to Labor Law, Mining Law no. 3213 and other related sublegislation are also supporting occupational health and safety measures.

Supervision and control of occupational health and safety related matter in mining facilities are undertaken by Ministry of Labor and Social Security while technical, financial and occupational safety controls of mine pits are undertaken by MENR.

Mining sector, by its nature, has a specific character with respect torisks it entails and is among the heavy and dangerous sectors which require knowledge, experience, expertise and continuous supervision. This sector is among the most risky sectors in terms of occupational accidents and diseases. Thus various studies are ongoing in this respect. A leading one among these is the Occupational Health and Safety Campaign in Mining Sector realized in 2007-2008 with collaboration of Chamber of Mining Engineers. Within the scope of the campaign, seminars were organized in regions with high frequency of occupational accidents in the country. Seminars especially focused on topics like mining legislation, responsibilities of the employers, occupational inspection in mines, safety culture, risk assessment, presentation of sample occupational accidents in mining sector and preventative measures, accident statistics, relation of efficiency with occupational health and safety, pneumoconiosis disease, work-place doctorship, dust problem in mines and personal protective equipment used in mines.